

Amendments to the Claims:

This listing of claims replaces all prior listings, and versions, of claims in the application:

Listing of Claims:

1. (Currently amended) An Apparatus apparatus for a radio communication system having a network part that maintains a network-copy of a first database containing data and a mobile node that maintains a mobile-copy of the first database containing data, the first database being comprised of a plurality of records, a record being comprised of a plurality of fields, each field being populated with data, the data of the network-copy and data of the mobile-copy of the first database, corresponding when the data in the network-copy of the first database and the data in the mobile-copy of the first database match one another, said apparatus for altering the data of at least one of the network-copy and the mobile-copy of the first database to place the network-copy and the mobile-copy in match with each other, said apparatus being embodied at the mobile node and comprising:

receiver circuitry, capable of receiving radio communication signals;

a request detector coupled to the receiver circuitry, the request detector capable of detecting requests for hash information and requests for data records;

a hash generator coupled to the request detector and receiving there from, requests for hash information, embodied at the mobile node and receiving data from the mobile copy of the first database; said hash generator capable of forming first and second hash values of data received by said hash generator from the first database, hash values being more computationally complex to determine than, and different from, checksums; the hash generator generating a first type of hash value that is being computed over the first database responsive to a first request received by the hash generator from the request detector, using a first technique, the second hash value being computed over an individual record of the first database using a second technique, the first hash value being formed for communication to the network part to determine whether

the network-copy and the mobile-copy are in match with one another, said second hash value being computed over an individual record of the first data base and communicated to the network part, after said first hash value has been computed and communicated to the network part and used by the network part to determine that the network-copy and the mobile-copy are not in match with one another the second hash value being generated by the hash generator responsive to the receipt by the request detector of a second request for additional hash information, a second request for additional hash information being received by the request detector only if the mobile copy of the first hash value does not match the network copy of the first hash value; and

a content retriever embodied at the mobile node coupled to said request detector, said content retriever retrieving data records from the mobile-copy of the first database responsive to requests received by said content receiver from the request detector, upon receipt of a first signal, the first signal originating from the network part and indicating the network part's determination that the network copy of the first database and the mobile copy of the first database are out of match, the first signal being sent by the network part after the network part receives both the first hash value and the second hash value, data records retrieved by said content retriever for communication to the network part, and used by the network part to synchronize the network-copy and the mobile-copy to each other.

2. (Previously presented) The apparatus of claim 1 wherein said hash generator generates the first hash values responsive to an external triggering event, occurrence of which is detectable at the mobile node.

3. (Previously presented) The apparatus of claim 1 wherein said hash generator generates the second hash values responsive to an external triggering event, occurrence of which is detectable at the mobile node.

4. (Currently amended) The apparatus of claim 3 wherein said hash generator generates the first [[-type]] hashes upon detection of an external triggering event, the occurrence of which is detectable at the mobile node and wherein said hash generator generates the second [[-type]] hashes responsive to a network part determination that the first [[-type]] hashes, generated by said hash generator did not match a first hash generated by the network part.

5. (Currently amended) The apparatus of claim 1 wherein the data maintained at the network-copy and the mobile-copy of the first database is comprised of data records, each data record being comprised of fields including at least a first key field and at least a first record field, and wherein the second[[-type]] hashes selectably generated by said hash generator are formed of values of the at least the first key field.

6. (Previously presented) The apparatus of claim 1 wherein the determination that the network-copy and the mobile-copy are out of match is made responsive to values of the second-type hashes formed of the values of the at least the key field.

7. (Previously presented) The apparatus of claim 1 wherein the data retrieved by said content retriever comprises both the at least the first key field and the at least the first record field.

8. (Previously presented) The radio communication system of claim 1, wherein the network part comprises:

a determiner embodied at the network part and which receives hash values generated by said hash generator embodied at the mobile node, said determiner determining whether the hash values generated by the hash generator at the mobile node, match with corresponding hash values generated at the network part; and

a requestor coupled to said determiner and receiving indications that a hash value from the mobile node does not match a corresponding hash value generated at the network part, said

requester requesting from the mobile node, additional information associated with the mobile-copy of the first database.

9. (Previously presented) The apparatus of claim 8 wherein the hash values generated at the network part include said first hash value and said second hash value.

10. (Previously presented) The apparatus of claim 8 wherein the additional information requested by said requestor comprises a request for the mobile node to deliver the second hash value to the comparator.

11. (Previously presented) The apparatus of claim 8 wherein the data maintained at the network-copy and the mobile-copy of the first database is comprised of data records and wherein the additional information requested by said requestor comprises a request for the mobile node to deliver at least portions of the data records.

12. (Previously presented) The apparatus of claim 11 further comprising a comparator receiving from the mobile node, data records or portions thereof and adapted to compare data records or portions thereof from the mobile node, to corresponding values of the network-copy of the first database.

13. (Previously presented) The apparatus of claim 12 further comprising a database value updater coupled to said comparator, said database value updater being responsive to comparisons made by said comparator to alter at least one data record of a selected one of the mobile-copy and the network-copy of the at least the first database.

14. (Previously presented) The apparatus of claim 13 wherein said database value updater operates pursuant to a selected conflict resolution protocol.

15. (Currently amended) A method for a radio communication system having a network part that maintains a network-copy of a first database and a mobile node that maintains a mobile-copy of the first database, the first database being comprised of a plurality of records, a record being comprised of a plurality of fields and each field being populated with data, the network-copy and the mobile-copy of the first database corresponding to each other when data in the network-copy and data in the mobile-copy of the first database are match one another, said method for synchronizing the network-copy of the first database with the mobile-copy of the first database said method comprising:

receiving radio signals containing data;

detecting in the received radio signals, requests for hash information and requests for data records;

responsive to the receipt of a first request for hash information, sending from the mobile node to the network part, a first hash value that is calculated over the first database using a first technique, from the mobile node to the network part, the first hash value representative of the mobile-copy of the first database;

comparing, at the network part, the first hash value received from the mobile node, to a second hash value calculated at the network part, the second hash value being calculated from the network-copy of the first database and representative of the network copy of the first database; using the first technique; and

responsive to a determination that the first hash value received from the mobile node does not match the second hash value calculated at the network part, requesting from the mobile node, a third hash value that is calculated at the mobile node over a first individual record of the mobile-copy of the first database using a second technique; and

sending the third hash value from the mobile node to the network part; and

at the network part, comparing the third hash value received from the mobile to a fourth hash value calculated at the network part over the network copy of said first individual record using said second technique; ~~using said second technique;~~

~~wherein the hash values are more computationally intensive and different from checksums; and~~

wherein the network copy of the first database and the mobile node copy of the first database are determined to be different from each other when the first and second hash values are different from each other; and

wherein the first individual record of the mobile copy of the first database is determined to be different from first individual record of the network copy of the first database [[or]] when the third and fourth hash value are different from each other.

16. (Previously presented) The method of claim 15 wherein the third hash value is calculated from the first portion of the mobile node copy of the first database and wherein the fourth hash value is calculated from a corresponding first portion of the network copy of the first database.

17. (Previously presented) The method of claim 15 further comprising the operations of: requesting at least a portion of the mobile-copy of the first database to be transmitted from the mobile node to the network in response to a comparison of the third hash value to the fourth hash value.

18. (Previously presented) The method of claim 17 further comprising the operations of: delivering a portion of the mobile-copy to the network part; comparing the portion of the mobile copy delivered to the network part with a corresponding portion of the network-copy of the first database; and overwriting portions of the network-copy of the first database and the mobile-copy of the first database responsive to comparisons made during said operation of comparing the portions of the mobile-copy to the network copy.

19. Canceled.

20. (Currently amended) The method of claim [[19]] 18 further comprising the operation of creating a change-history by indicating which portions of the database were overwritten.

21. (New) A method for synchronizing a plurality of databases on a network with a plurality of databases on a mobile node, the method comprising:

creating first hash information pursuant to a first technique, the first hash information being representative of values contained in the mobile node's plurality of databases;

communicating the first hash information to the network node;

receiving at a request detector coupled to receiver circuitry of the mobile node a request from the network for second hash information when the network determines, based at least on the first hash information, that the plurality of databases on the network and the plurality of databases on the mobile node are out-of-match;

creating the second hash information pursuant to a second technique;

wherein the first technique is less computationally-intensive than the second technique and the first hash information requires less communication channel capacity than the second hash information.